

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 January 2004 (15.01.2004)

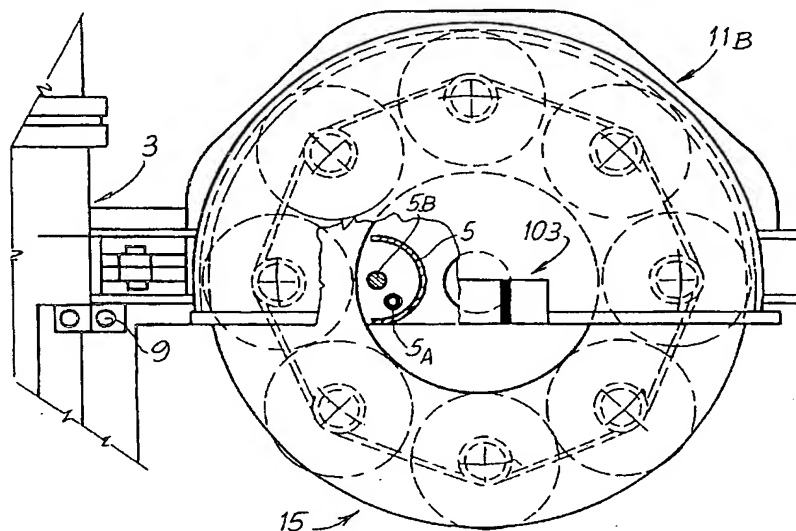
PCT

(10) International Publication Number  
**WO 2004/005576 A1**

- (51) International Patent Classification<sup>7</sup>: **C23C 14/50**, 16/50, 16/458
- (21) International Application Number: **PCT/IT2003/000413**
- (22) International Filing Date: **2 July 2003 (02.07.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data: **02425446.8** **8 July 2002 (08.07.2002)** **EP**
- (71) Applicant (for all designated States except US): **GALILEO VACUUM SYSTEM S.R.L.** [IT/IT]; Via delle Fonti 432, I-59100 Prato (IT).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **FANFANI, Stefano** [IT/IT]; Via della Cernaia 30, I-50129 Firenze (IT).
- (74) Agents: **MANNUCCI, Michele et al.**; Uff. Tecn. Ing. A. Mannucci S.r.l., Via della Scala, 4, I-50123 Firenze (IT).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published: — with international search report

[Continued on next page]

(54) Title: **PLANT FOR VACUUM COATING OF OBJECTS TREATED IN BATCHES**



(57) Abstract: A plant for vacuum metallization of objects treated in batches is described, said plant comprising: a vacuum chamber; at least one carousel (15) which rotates about an axis of rotation (A-A) and which is arranged inside said vacuum chamber when the plant is in operation; at least one discharge electrode (5B); at least one diffuser (5A) associated with said discharge electrode for introduction of at least one protective substance for metallization. The discharge electrode (5B) and the diffuser (5A) are associated with a housing arranged inside said vacuum chamber, in an approximately central position, said housing enclosing at least partly said diffuser and said electrode.

**BEST AVAILABLE COPY**